

Marked-up copies of the amendments to the Specification are provided in Appendix A, attached hereto.

Kindly make the following changes to the Specification:

— Delete the heading on page 1, line 5;

— Change page 1, line 7 to read:

— 1. FIELD OF THE INVENTION ;

Change page 1, line 13 to read:

— 2. BACKGROUND OF THE INVENTION

Page 3, line 3, delete the heading;

Change lines 9-11 to read:

— 3. SUMMARY OF THE INVENTION;

— Page 8, lines 10-13, delete the headings;

— Page 10, line 32, delete the heading;

— Page 11, line 14, delete the heading;

— Page 12, line 1, delete the heading;

— Please amend the paragraph on page 12, lines 3-7 to read:

*12*

The at least one diffractive optical element is preferably planar or aspheric whereby it can easily be adapted to said at least one reflecting surface of the front and back sides depending on their particular function.

Page 12, line 17, delete the heading;

Page 13, line 1, delete the heading;

Page 14, line 1, delete the heading;

Page 15, line 9, delete the heading;

Please amend the paragraph on page 15, lines 27-33 to read:

A2  
Imperfections in the diffractive optical element cause a substantial amount of stray light in spectrometers. By arranging the optical elements so that light from the diffractive optical element cannot be scattered directly onto the light detecting means, inclusion of light absorbing material can eliminate or reduce this highly undesired noise source.

Page 16, line 25, delete the heading;

Page 17, line 19, delete the heading;

Page 18, line 1, delete the heading;

Page 18, line 24, delete the heading;

Page 19, line 7, delete the heading;

Page 20, line 10, delete the heading;

Page 21, line 6, delete the heading;

Please amend the paragraph on page 20, lines 16-20 to read:

A3

Any of the spectrometer geometries described above can include distance sensing means, but in a preferred embodiment, the distance sensing means is combined with a transmission spectrometer, whereby the distance sensing means can reuse the spectral sensing means.

✓ Page 21, lines 27-29, delete the headings;

✓ Page 21, line 36, delete the heading;

✓ Page 22, line 15, delete the heading;

✓ Page 22, line 31, delete the heading;

✓ Page 23, line 5, delete the heading;

✓ Page 24, lines 1-3, delete the headings;

✓ Page 25, line 23, delete the heading;

Please amend the paragraph on page 26, lines 29-36 to read:

A4

Preferred embodiments including the same features for this aspect of the invention are similar to those described in the present general and detailed description including the examples.

✓ Page 27, line 1, delete the heading;

Please amend the paragraph on page 28, lines 18-25 to read:

A6

Preferred embodiments including the same features for this aspect of the invention are similar to those described in the present general and detailed description including the examples.

Page 28, line 28, delete the heading;

Page 30, line 14, delete the heading;

Page 31, line 15, change the heading to read:

4. BRIEF DESCRIPTION OF THE DRAWINGS

Page 34, line 1, change the heading to read:

5. DETAILED DESCRIPTION

Page 34, line 3, delete the heading;

Page 34, line 27, delete the heading;

Page 35, lines 13 and 15-16, delete the headings;

Page 37, lines 5-7, delete the heading;

Please change the paragraph on page 37, lines 4-6 to read:

*Alc*

Other preferred transmission spectrometer geometries will be shown in the following, but will not be substantiated by ray-tracing simulations.

Page 37, lines 9-11, delete the heading;

Page 37, lines 27 and 28, delete the heading;

Page 38, line 14, delete the heading;

Page 39, lines 11 and 12, delete the heading;

Page 40, lines 6-7, delete the heading;

✓ Page 41, lines 20-21, delete the heading;

✓ Please change page 44, lines 1-4 to read:

We Claim:

**IN THE ABSTRACT**

Kindly add the abstract found on the following page: